

FIG. 1

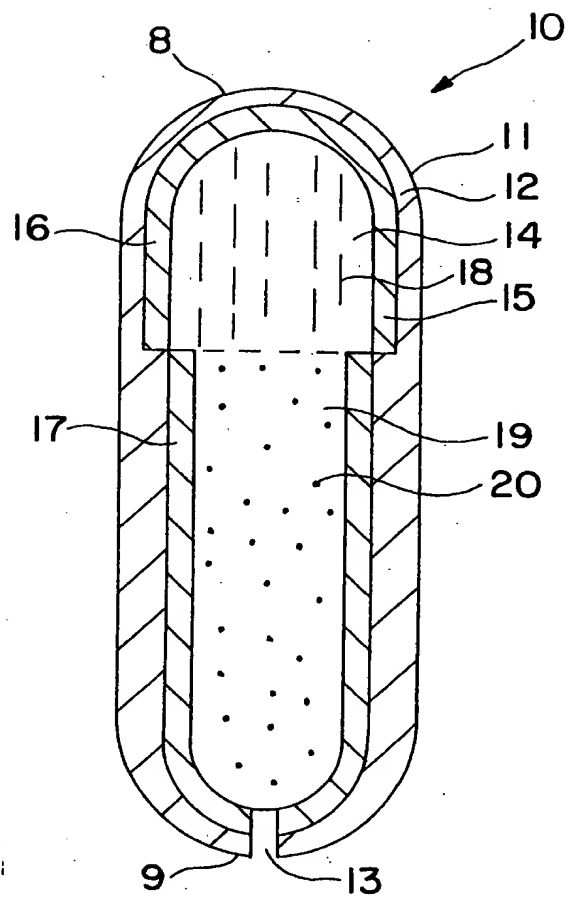


FIG. 2

FIG. 4

000017-10101250

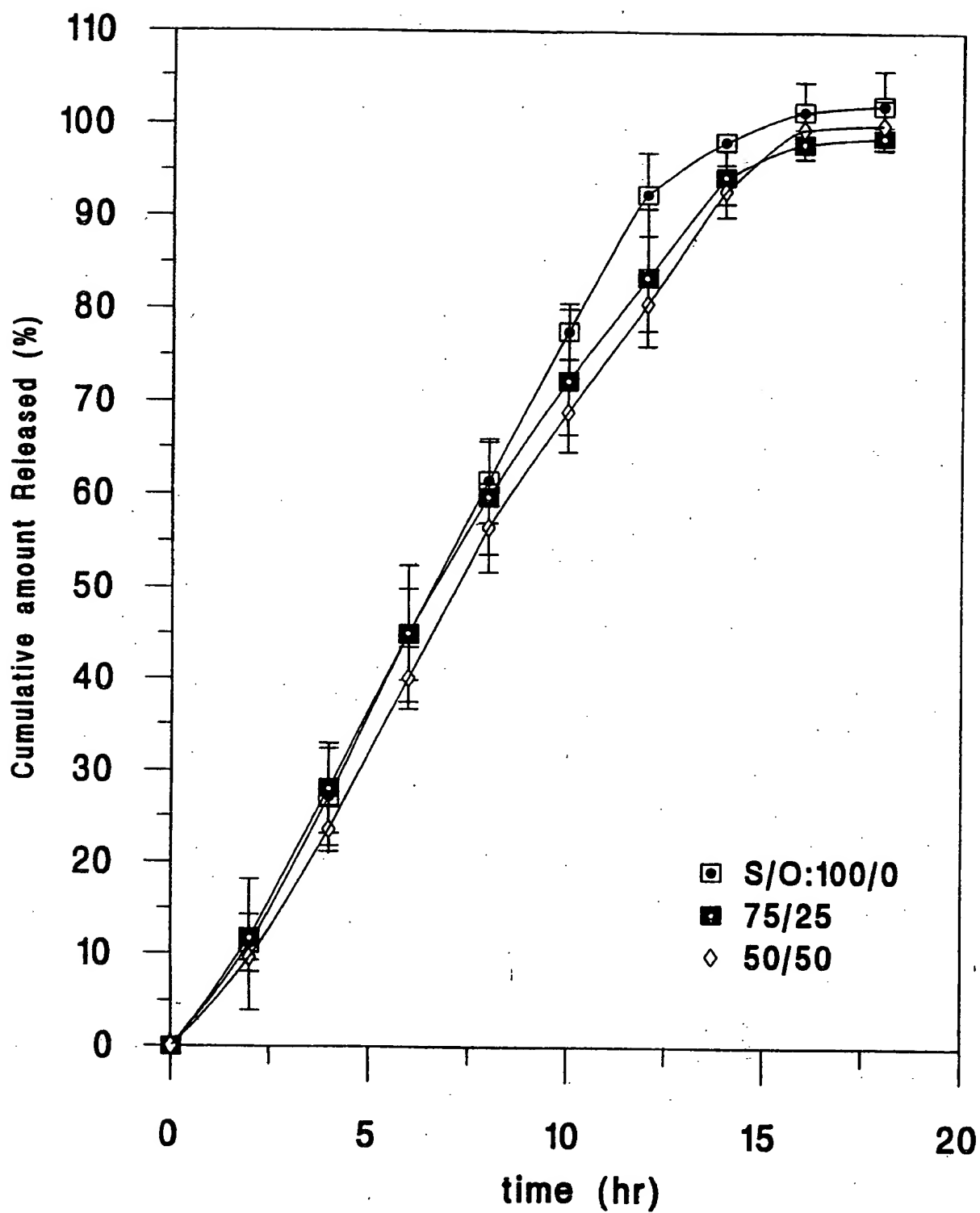
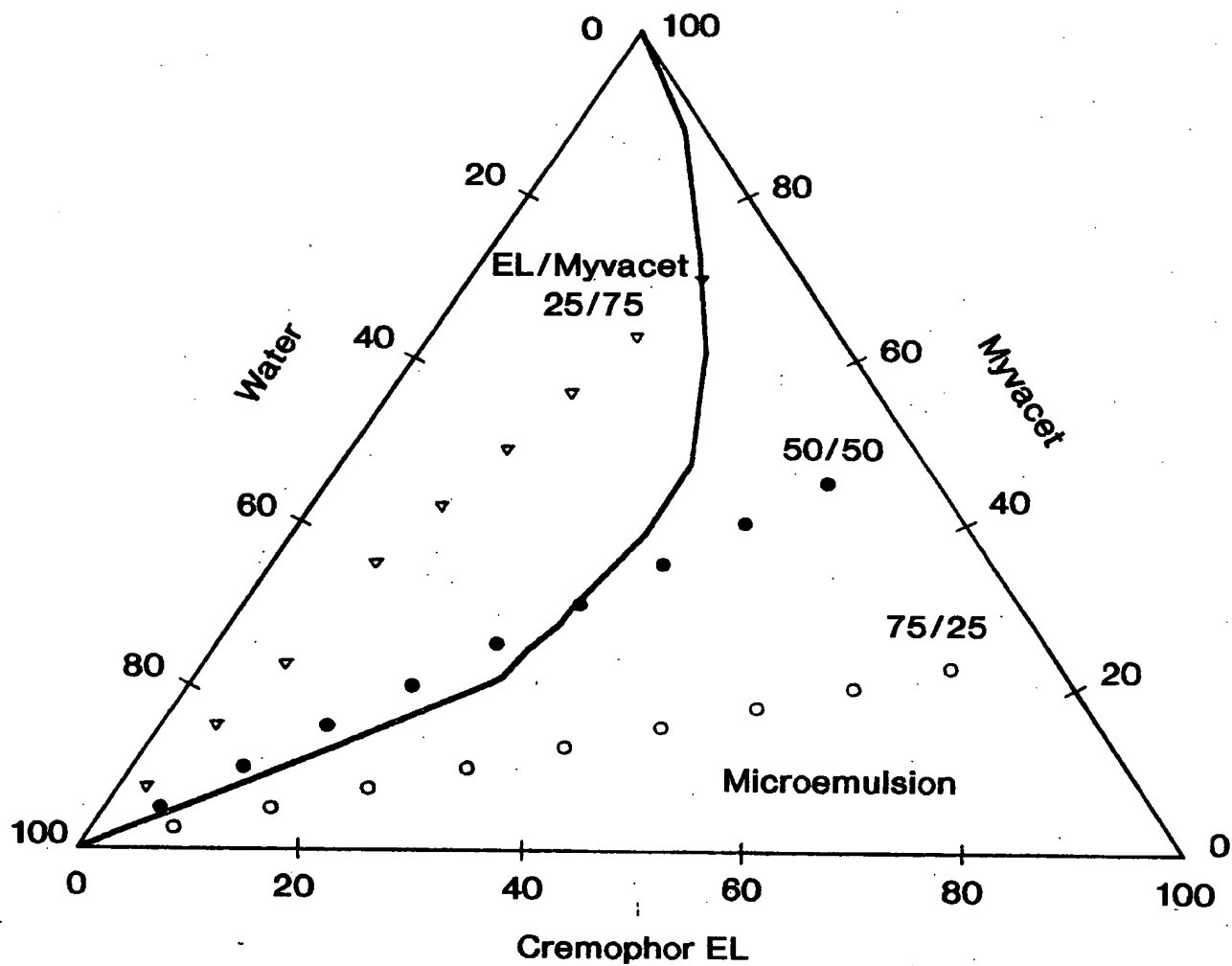


FIG. 6

000121-1610h260



Cremophor EL

FIG. 7

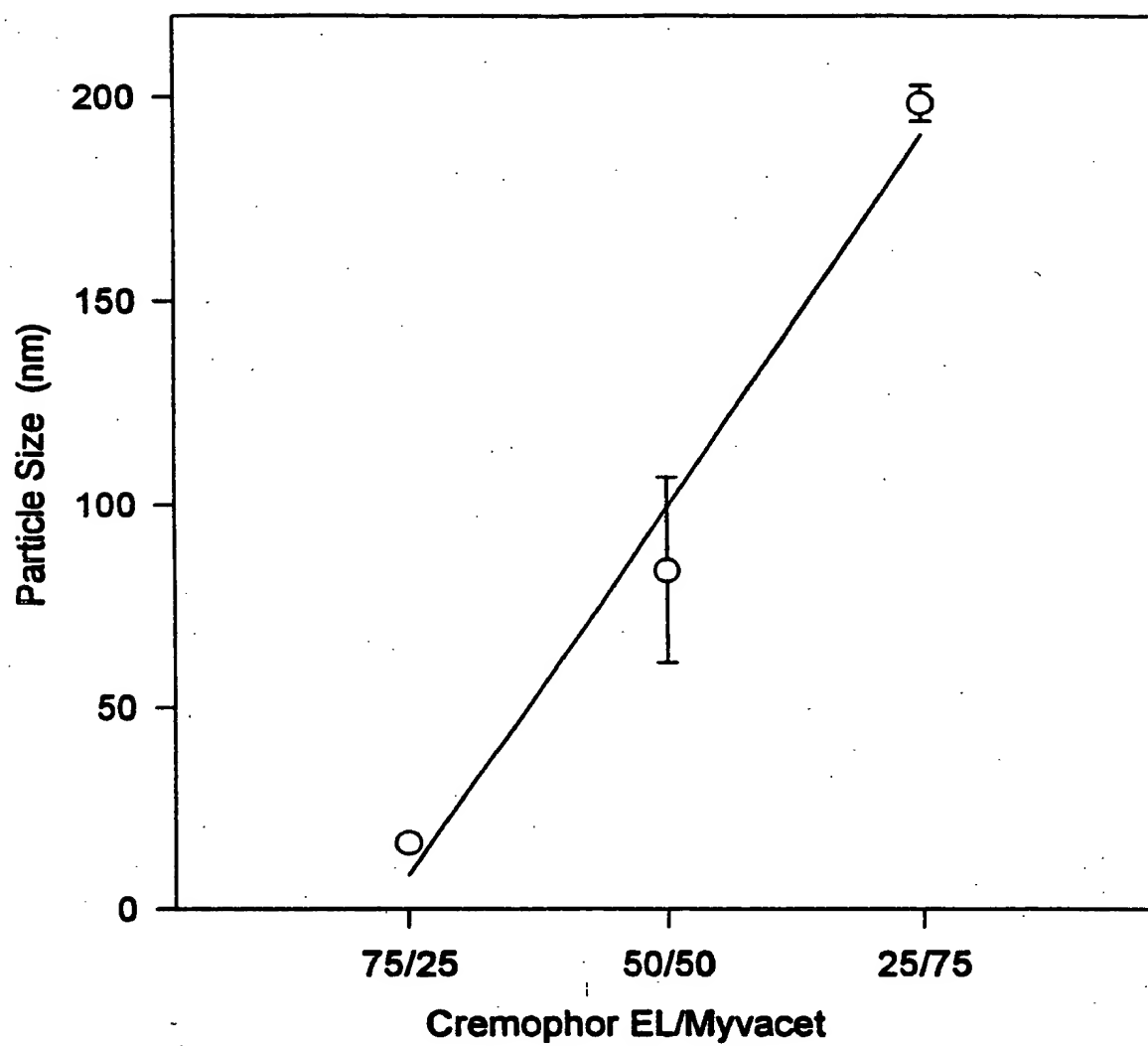
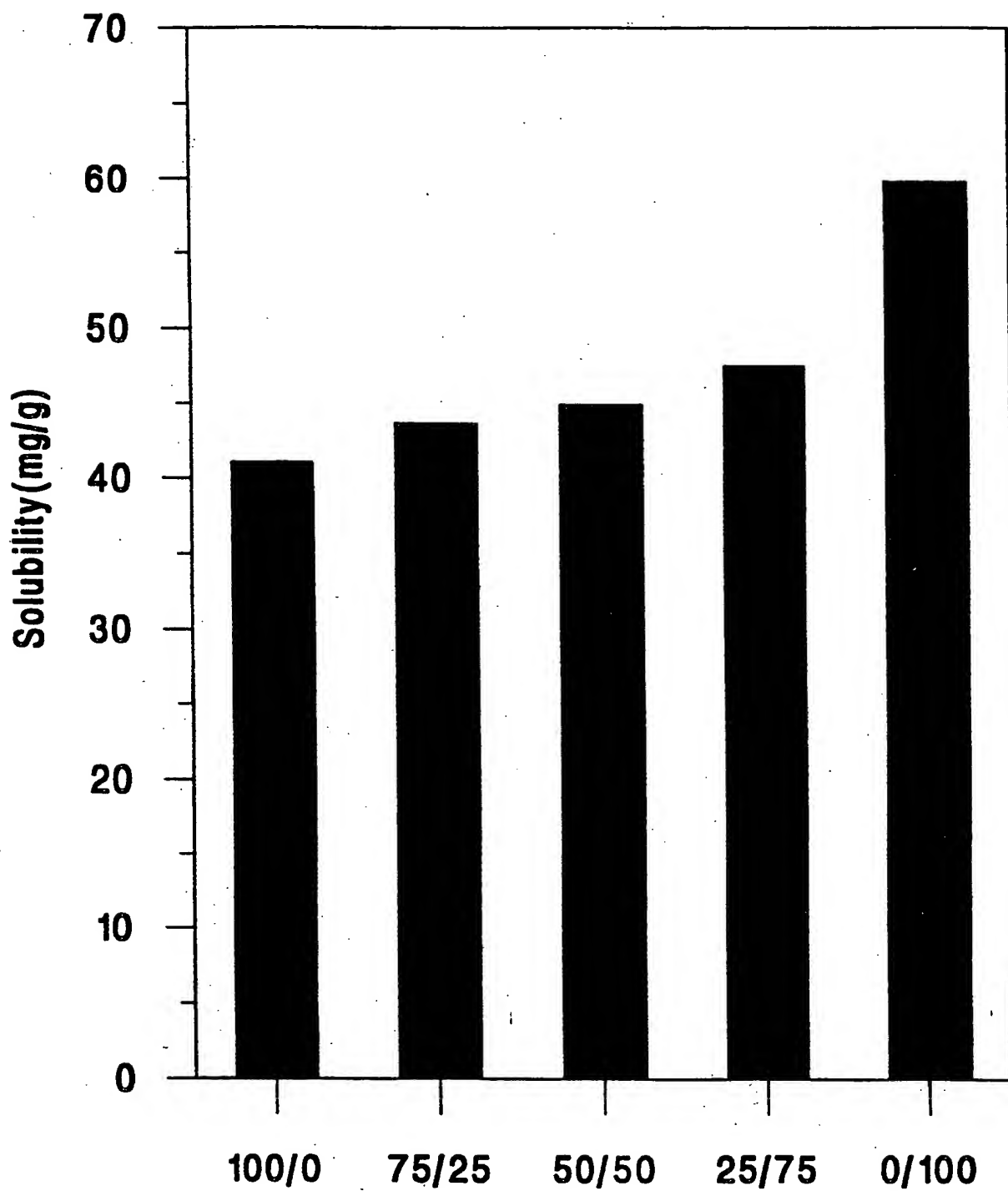


FIG. 8



Cremophor EL/Myvacet

FIG. 9

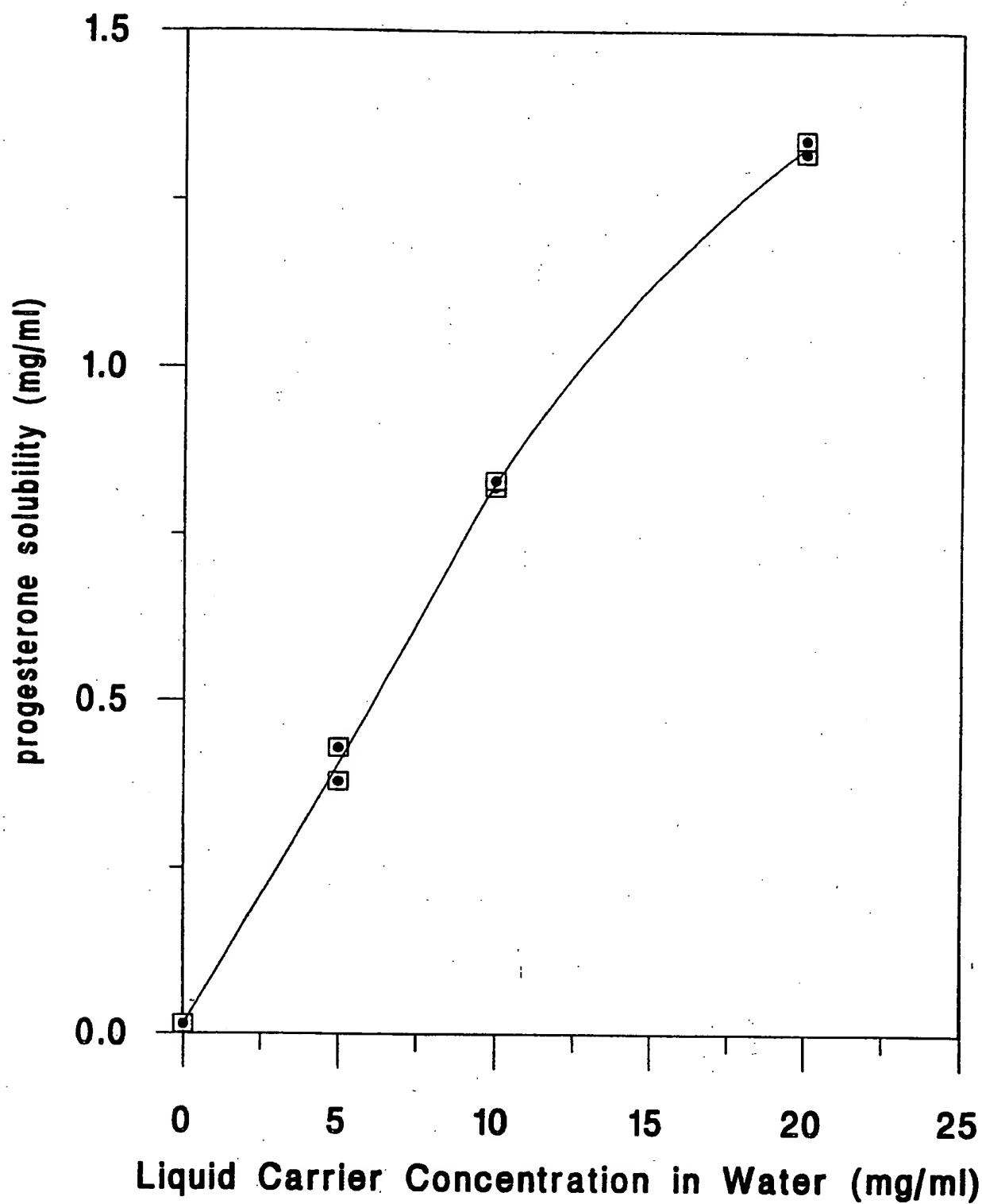


FIG. 10

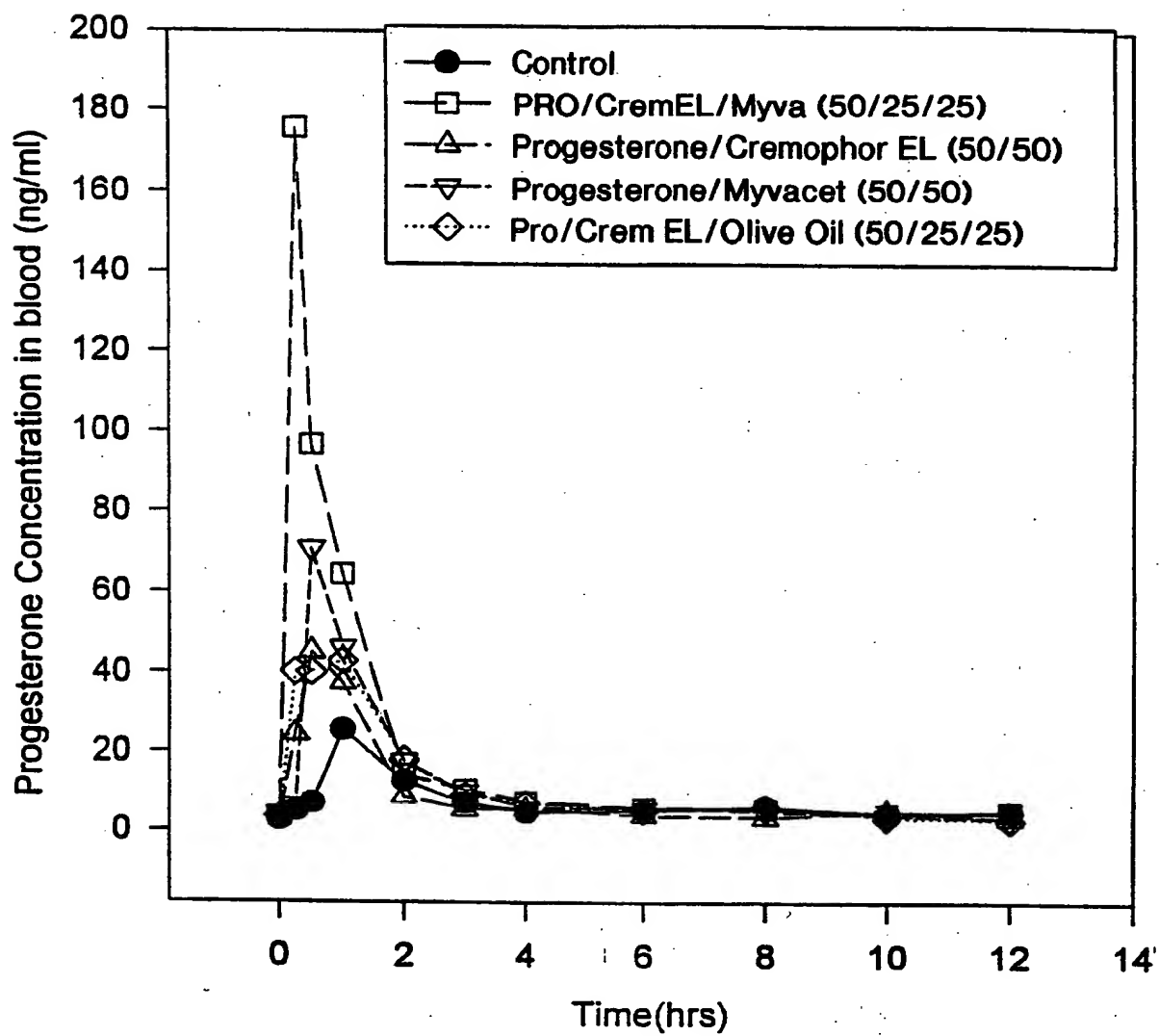


FIG. II

00000000000000000000

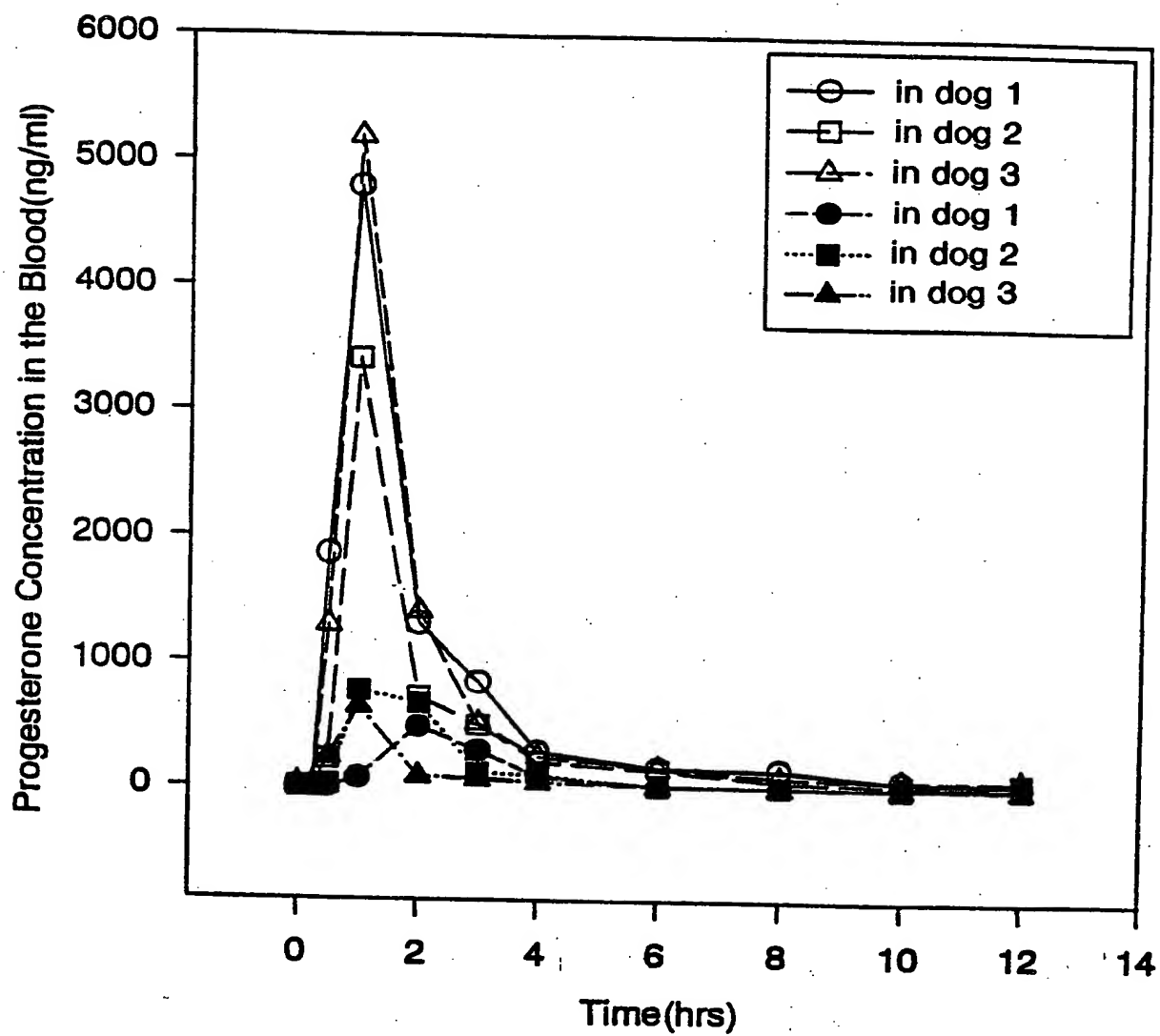


FIG. 13

**Pharmacokinetic Data for Oral Progesterone
Formulations Dosed to Dogs (40mg)**

Formulation #	T _{max} (h)			C _{max} (ng/ml)			AUC (ng/ml*h)	*Relative BA % Average (s.d)
	Dog 1	2	3	Dog 1	2	3		
1	1	1	1	38.4	13.9	24.4	104	100
2	0.25	0.50	0.25	252	90.8	248	226	232 (21)
3	0.50	0.25	0.50	53.4	57.7	33.7	109	130 (50)
4	0.5	1	1	174	57.1	30.4	167	176(108)
5	0.5	1	0.25	57.2	70.8	74.7	114	181(141)

AUC is calculated by trapezoidal rule from time zero to the last blood sampling point (12h).

The relative bioavailability is the ratio of AUC for liquid formulations to that for laqueus drug-layer formulation.

Formulation Composition (wt%)

C mponents	Formulation #				
	1	2	3	4	5
Progesterone	60	4			4
Mannitol	21				
Ac-di-sol	10				
Myji 52-s	5				
HPMC E-5	3				
Mg stearate	1				
Cremophor EL		48	96		48
Myvacet 9-45		48			
Olive oil				96	48

**Pharmacokinetic Data for Emulsion Progesterone Formulation and
Nonemulsion Push-Pill Drug-Layer Formulation (300mg dose)**

F rmulation #	T _{max} (h)				C _{max} (ng/ml)				AUC (ng/ml*h)				Relative BA (%) Average (s.d)
	Dog 1	2	3	Avg	Dog 1	2	3	Avg (s.d).	Dog 1	2	3	Avg.(s.d)	
Nonemulsion	2	1	1	1.33	489	778	649	639(145)	1101	1715	898	1238(425)	100
Emulsion	1	1	1	1	4800	3420	5180	4467(926)	7715	4708	7418	6614(1657)	600 (289)

AUC is calculated by trapezoidal rule from time zero to the last blood sampling point (12h).

The relative bioavailability is the ratio of AUC for liquid formulations to that for MPA-22 drug-layer formulation.

Formulation Composition (wt%)

Components	Nonemulsion Drug-Layer	Emulsion Oral Formulation
Progesterone	60	50
Mannitol	21	
Ac-di-sol	10	
Myji 52-s	5	12.5
HPMC E-5	3	
Mg stearate	1	
Cremophor EL		25.0
Myvacet 9-45		12.5